

PART II: TECHNICAL PROPOSAL (SECTOR PLAN)

I. Statement of Need

The Nebraska State Workforce Investment Board respectfully submits this proposal to provide workforce development, business development and public education and outreach in three energy industry sectors that the state is uniquely positioned as a regional and national leader. These sectors include renewable wind, biofuels, and 'green' building technologies. The purpose of this program is to preserve and create new jobs in the power generation, transportation, building, agriculture and waste management markets while reducing the environmental footprint of these energy-intensive industries. The goal of this proposed effort is to build a 'green' economy in Nebraska and to serve as a model for the development of a skilled workforce ready to meet the demands of energy efficiency and renewable energy industries unique to the U.S. Midwest region.

i. State of Nebraska Energy Policy

Continued access to affordable, reliable energy for Nebraska remains the primary mission of the state energy policy. However, in the 16 years since Nebraska's energy plan was first unveiled, global climate change, energy security, market volatility and emissions standards have Nebraska looking beyond fossil fuels for more stable, independent and environmentally conscious patterns of energy generation and use. In spite of abundant geothermal resources, reliable wind energy, and biofuels from energy crops and agricultural wastes, Nebraska ranks 48th in the U.S. in renewable energy production (308MW). Less than one percent of the state's electric generation is from non-hydroelectric renewable energy resources.¹

¹ Nebraska Renewable Electricity Profile. Energy Information Administration. U.S. Department of Energy. 2007.

Nebraska's 'green' economy displays a diverse array of 'green' businesses with different levels of specialization. Nebraska is clearly a national leader in 'green' transportation. Other areas of growing competitive advantage are in energy efficiency, energy generation, and water management.² Wind energy is currently the most versatile and economical renewable energy option available. Although Nebraska is ranked 24th in actual installed wind energy capacity, it ranks 6th in the U.S. in wind energy potential. Omaha Public Power District, one of the largest publicly owned electric utilities in the U.S., recently set a goal to generate 10 % of the energy provided to its 340,000 customers from renewable resources by 2020³. Such an initiative will place Nebraska among the nation's leaders in renewable energy and create jobs in the wind turbine, energy storage and transmission utility industries throughout the U.S. Midwest region.

As the nation's largest producer of methane energy from animal waste and second largest producer of ethanol, Nebraska is uniquely positioned to create new employment opportunities for developing, producing and operating ethanol refineries and methane recovery units. As part of the state energy sector strategy, Nebraska will explore ways to encourage economic development and job creation in industries that help farms replace energy consumed with renewable energy sources in their operations.

The construction industry is among the largest contributor to the U.S. economy and job market, yet, the built environment consumes more than one-third of the nation's energy. In Nebraska, \$10M in Recovery Act funds will be used to maximize energy efficiency in existing public buildings. Nebraska's Dollar and Energy Savings Loan Program will finance local government energy efficiency improvements for public buildings. According to the report 'Occupational and Industry Projections' developed by Nebraska Department of Labor, state job

² State Green Economic Profiles. The National Governors Association Center for Best Practices. 2008.

³ www.repoweramerica.org. Nebraska factsheet. Last referenced 10/06/09.

growth in the building design, construction and O&M industry is expected to exceed 17% or 13,000 jobs from 2006 to 2016, compared to 10% job growth nationally during the same period.

In the Strategic State Recovery Act Plan for WIA and Wagner-Peyser, it is recognized that the demand for products and services in the 'green job' sector will create job training opportunities. The Strategic Plan also calls for WIA and Wagner-Peyser resources to focus on providing training and re-employment services in demand occupations for priority populations. The 'green' industry is primed to provide high skill, high wage, high demand jobs for Nebraska's unemployed.

ii. Current and Projected Employment Opportunities

The recession has significantly impacted the employment condition in the State of Nebraska. The total number of unemployed workers increased 46.2% from 32,866 in 2008 to 48,052 in 2009. Unemployment benefits nearly doubled from \$59.8M to \$118.1M from 2008 to 2009 and extended unemployment benefits have doubled from \$23.1M in 2008 to \$48.3M in 2009. Yet, Nebraska lacked skilled workers before the recession and anticipates a shortage in skilled workers again after the recovery. The Nebraska Department of Labor (NDOL) *Job Vacancy Survey* results showed an estimated 38,513 jobs open statewide during the fourth quarter of 2007 and an overall job vacancy rate of 4.4 percent. Nebraska, not unlike other states, has experienced a significant increase in layoffs. Between October 1, 2008, and March 31, 2009, there were 209 public layoffs. More than 6,000 employees were affected by the reductions, with just under one-half (45%) of those lay-offs in the manufacturing industry. The Trade, Transportation and Utilities category, Nebraska's largest employing sector has also had significant layoffs with 48 events (23.0%) occurring during the same period. It is believed that many of these laid-off workers have transferrable skills which will complement the *new* 'green'

job opportunities being created in Nebraska. According to a *Pew Charitable Trust* Clean Energy Economy study, Nebraska had the second highest growth in 'green collar' jobs in the U.S. during the last ten years. Although total jobs have remained relatively constant, declining slightly by an average of 0.5% annually, job gains in 'green' energy markets have increased rapidly, growing an average of 10% per year.

iii. Training Activities

Training will consist of content development and delivery of training to leverage the expertise and resources of statewide Workforce Investment Boards (WIBs), One Stop Career Centers, labor organizations, industry associations, universities, community colleges, and other Federal and state agencies. Training activities will 1) address the need of the high-growth 'green' industries, 2) be quickly and effectively delivered to priority populations across the state; 3) provide access to 'green' jobs and career pathways for employment in new and emerging 'green' energy industries, 4) be tracked and independently assessed, and 5) be sustained. To maximize the speed and efficiency to which the training can be implemented, the program will a) adopt and update existing programs through training partners, b) work with employers and industry organizations to provide on-the-job work experience or customized training, and c) utilize the U.S. DOL Nebraska Office of Apprenticeship to expand pre-apprenticeship and apprenticeship programs.

As part of the training program, One Stop Career Staff will assess the knowledge, skills and abilities (KSA) of displaced workers, at-risk youth, military veterans and other unemployed or underemployed priority groups, for the technical skill sets that will be required to obtain employment in the 'green' energy marketplace. To maximize effectiveness and minimize program costs, training will be developed to re-tool and place workers in new 'green collar'

occupations that most closely match their existing skill sets. General and trade specific training modules that will be customized according to the needs of a focus industry or demographic group. The training program will consist of Internet delivery suitable for both classroom and self-study and 'hands-on' field training. The training content will be developed in a bilingual (English-Spanish) and literacy appropriate format. Training materials and curricula will be developed in a manner that can be replicated on a state, regional, and national level.

Training will be delivered by local community colleges, secondary schools, labor organizations, and trade associations representing these new and emerging 'green' energy industries. All training providers will be local WIB approved through the Eligible Training Provider (ETP) process. Apprenticeships will be developed with employers to provide on-the-job training and job placement in careers that develop technology (engineering), produce materials and equipment (manufacturing), sell products and services (wholesale and retail), and install, build, commission, operate and maintain renewable energy and energy efficiency materials, equipment and systems (construction, utilities, management and O&M). To the greatest extent possible, training will result in a degree or certification. A more detailed description of proposed training activities is provided in Section III.i.

iv. Workforce Characteristics and Challenges

The Federal Census Bureau estimates between 2000 and 2030, Nebraska's population is projected to increase by 18.4 %. Total population is expected to be 2,025,648 in 2030, up from 1,783,432 in 2009. Minorities represent 15.5% of our population. Hispanics or Latinos are the largest minority group at 7.5% of the state's population. The Hispanic or Latino population increased by 38,553 or 40.5% between 2000 and 2007. This workforce trend presents language and cultural challenges.

Another characteristic of Nebraska's workforce is our aging population. According to the Nebraska Department of Labor-Labor Market Information Office, more than 150,000 workers (17%) are age 55 or older. The older workers claim a larger share of the non-metropolitan area workforce representing 21.6%, compared to those in the metropolitan areas that comprise 16.0% of the workforce. The average age of workers in Nebraska was 38.0 in 2008. The average age of workers in industries associated with this grant are: Manufacturing, 40.7; Construction, 37.6; Trade, Transportation, and Utilities, 38.4; and Agriculture, Forestry, and Fishing, 37.3.

Another workforce challenge Nebraska faces is the out-migration of young educated workers. High school graduation rate from 2007 to 2008 was 89.1% with 19,995 graduates and 2,449 dropouts. However, estimated net migration of 22- to 64-year-olds reveals that there is a historical trend of net out-migration of Nebraska's educated population and an in-migration of adults with a high school diploma or less. This is creating a noticeable 'brain-drain' effect.

To address these issues, the training format in this proposal will be offered in bilingual (English-Spanish) and literacy appropriate formats. This will open up learning opportunities and skill set acquisition for workers at all levels and from diverse backgrounds. Nebraska's overall public education efforts to increase awareness will expand career education and planning materials include career pathways in renewable wind, biofuels, and 'green' building technologies. These materials will be used to promote 'green' career opportunities to both adults and high school students.

II. State Energy Sector Partnership (SESP)

Under the leadership of the Nebraska State Workforce Investment Board, the SESP has developed a comprehensive strategy that aligns the Governor's Workforce Vision with the state's energy policy to prepare an educated and skilled workforce to meet the current and emerging

needs of the energy efficiency and renewable energy industries in Nebraska and the U.S.

Midwest region.

i. Partnership

Nebraska's State Energy Sector Partnership (SESP) will serve as a steering committee throughout the life of the grant. Leadership of the Nebraska State WIB has designated the SESP committee members and a charter has been signed by the membership. The SESP will participate in the planning of the State's energy sector plan and ensure the overall success of the grant. At the beginning of the grant, the SESP will be meeting on a monthly basis to provide guidance in the creation of the energy sector plan and in the implementation of the grant activities. As the energy sector plan is finalized and activities are established, the SESP will move to quarterly meetings. Early on in the process, the Governor will appoint a "Blue Ribbon" panel of business sector representatives to specifically advise him of priorities, opportunities, and limitations that exist in implementing renewable energy and energy efficiency strategies. SESP membership will include: the Lieutenant Governor, Nebraska State Workforce Investment Board, Nebraska Department of Labor, Nebraska Energy Office, Nebraska Department of Economic Development, Nebraska Department of Agriculture, Nebraska Department of Education, University of Nebraska, Nebraska State Community College Association, AFL/CIO, Home Builders Association of Lincoln, The Associated General Contractors of America, FutureForce Nebraska, Black Hills Energy Corporation, International Brotherhood of Electrical Workers Local Union 22, Steamfitters & Plumbers Local Union 464, Kiewit Building Group, Inc., Nebraska State Homebuilders Association, Nebraska Department of Veterans Affairs, Lincoln Electric System, and Omaha Public Power District.

ii. Roles and Responsibilities

The Chair of the Nebraska State WIB and the Lieutenant Governor will co-chair the SESP. The primary role of each SESP member is to participate in the strategic development and planning of the Sector Plan herein. In addition, each SESP member is involved in the selection of local and regional project teams statewide. SESP members will form a 'steering committee' that will review and approve workforce development and training activities, as well as business development and public education and outreach activities. The SESP steering committee will provide oversight of this proposed workforce development program, and, will play a critical role in its sustainability and growth. The partners will form four oversight groups in the areas of 1) training materials development, 2) training delivery, 3) recruitment and retention, and 4) job placement. During the first year of the grant, the SESP will meet monthly. In the second and third year of the grant, the SESP will meet quarterly.

iii. Leveraged Funds and Resources

One of the responsibilities of the SESP is to identify and encourage synergies between this proposed workforce development initiative, other Recovery Act projects, and Federally and state funded initiatives that fund job retention and training programs for workers in renewable energy and energy efficiency sectors. This SESP will strive to not duplicate services offered from previously appropriated funds.

Activities funded by this grant will be leveraged to the greatest extent possible from the annual allocation of the following sources: affordable housing funds available through HUD, Department of Labor funds available through WIA and Wagner Peyser, energy funds available through the State Energy Office, and the Worker Training funds available through interest from the State's SUTA. The SESP will pay particular attention to leveraging and coordinating with any and all Recovery Act grants that are awarded which interface with activities outlined in this

proposal. Those funds include: \$30.91 million awarded to the Nebraska Energy Office (\$10 million reserved for training), \$8 million HUD dollars, \$62 million for Disadvantaged Children (Title 1), \$10.23M⁴ to Nebraska Department of Labor for WIA, Wagner Peyser and re-employment services. The SESP is aware that one proposal was submitted for the Energy Partnership grant, two proposals for the Pathways Out of Poverty Grant, and Nebraska was one of seven states that participated in the Labor Market Information Improvement grant. It is the commitment of the SESP that if these grants are awarded a high level of coordination and will take place to ensure the optimum amount of training can be offered to Nebraska's workers.

III. Strategy and Project Work Plan

The following work plan outlines a 3-year project to develop and deliver training that will enable unemployed and underemployed populations to obtain employment in new and emerging 'green' energy industries. The near-term goal of this program is to preserve and create new jobs in power generation, transportation, building, agriculture and waste management markets while reducing the environmental footprint of these energy-intensive industries. The long-term goal of this effort is to build a 'green' economy in Nebraska and to serve as a model for the development of a skilled workforce.

i. State Energy Sector Strategy (2010-2016)

Nebraska Energy Office is nearing completion of the State Energy Plan. It is anticipated to be final by the end of October 2009. The creation of this Energy Plan is the result of nine comment sessions held across the state from October 29 through November 7, 2008, and additional comments via mail and the web taken through December 1, 2008. The State Energy Plan offers a vision of the role that Nebraska's state government agencies, and elected officials

⁴ Nebraska Recovery Act website. www.recovery.nebraska.gov. Last entered on 10/15/2009.

can play in solving energy problems, taking advantage of our energy opportunities, and shaping our energy future. As stated in the Interim 2009 Nebraska Energy Plan, "These new goals and policies, whether through support for clean, renewable sources of energy or for advanced energy efficiency measures, can create jobs, lessen dependence on fossil fuels, help Nebraska and the world meet ambitious climate stabilization targets, and boost new industries capable of revitalizing the economy." As a result of the collaboration to create this proposal a section dedicated to workforce challenges and solutions will be added to the State Energy Plan.

The technical proposal outlined in this grant will serve as the foundation for Nebraska's energy sector plan. Nebraska's strategy for training workers in the energy efficiency and renewable energy industries takes a comprehensive approach in identifying industry potential (existing & new), gap analysis to identify business sector training needs, training vendor capacity (existing & new), labor pool analysis, and the identification of unique training and education models to best meet the emerging need of employers.

In alignment with Nebraska's Energy Plan and the Governor's Workforce Vision, this proposal will focus on training to prepare an educated and skilled workforce in new and emerging renewable energy and energy efficiency industries (Figure 1). The Governor's Workforce Vision positions Nebraska to compete in the 21st century amid the opportunities and challenges of new technologies, education and international competition. As outlined in the Strategic State Plan for WIA and Wagner-Peyser, the core of this vision is the need to provide workforce development resources for 'learning, earning and living' and is further expressed in the following goals 1) Creating a dynamic, market-driven workforce development system focusing on high-growth, high-demand industries, and 2) Increasing the effectiveness and integration of workforce development services by multiple public and private partners.

renewable energy and energy efficiency programs at the forefront of the State's Energy Policy.

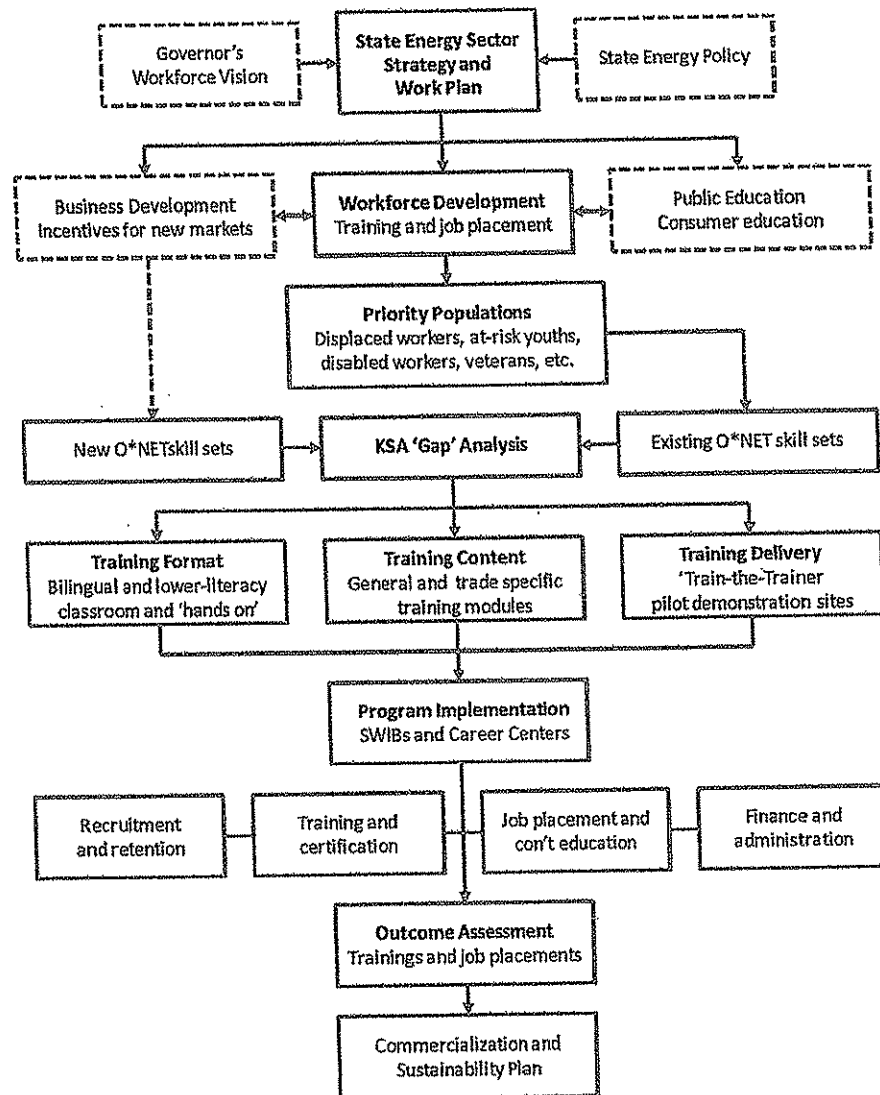


Figure 1. Proposed state energy sector strategy and work plan.

These programs include workforce development, business development, public education, outreach in wind energy, ethanol energy crops, methane recovery from agricultural wastes, solar energy, geothermal energy, and 'green' building technologies.

Number of Jobs Available

**BUILDING A 'GREEN' ECONOMY:
NEBRASKA STATE ENERGY SECTOR PARTNERSHIP (SESP) AND TRAINING**

Nebraska had the second highest growth in 'green collar' jobs in the U.S. during the last ten years, growing an average of 10% per year (Table I).

According to the Center for American Progress, "By our estimate a \$581 million investment devoted to reducing fossil fuel use and increasing energy efficiency could generate over 12,000 'green' jobs in Nebraska within two years, and another report projects the state gaining over 20,000 new 'green' jobs within 30 years!"⁵ For example, Nucor Corporation in northeast Nebraska has the nation's largest recycle and waste reduction plant. It currently has 850 employees and has plans for expansion. Also in northeast Nebraska, Natural Innovative Renewable Energy (NIRE), will soon be opening a 60 million gallon biodiesel plant in South Sioux City which will create 40 new jobs. The Nebraska Energy Office will award \$41.6M to fund weatherization projects and \$1.9M under the Rebuild America Category to retrofit commercial and multi-family building since 1996. Projected job growth through 2016 for renewable energy type of employment is illustrated in the chart below. (Table I). For that same time period the average job growth from Nebraska is expected to be 14%.

Table 1: Occupational projections related to 'green' building and construction in Nebraska.

Sector	SOC	Occupation	Projected Growth
Renewable Energy Generation	11-3071	Electrical energy storage/distribution technicians	16.4%
	11-1021	Solid waste (energy) engineers/managers	5.4%
	11-10371	Fuel storage technicians	16.4%
	29-9012	Plant technical specialists -- safety equipment testing	19.5%
	47-2061	Biofuels plant construction workers	12.3%
	49-9042	Methane/ethanol capturing system maintenance workers	10.6%
	17-2141	Geothermal power generation mechanical engineers	17.3%
	47-2211	Geothermal sheet metal workers	17.2%
	17-2141	Hydroelectric plant mechanical engineers	17.3%
	17-2051	Solar operations engineers	20.8%
	17-2051	Wastewater plant civil engineers	20.8%
	17-2141	Wind turbine mechanical engineers	17.3%
Energy Efficiency	47-4011	Building inspectors	16.6%
	17-2051	Civil engineers	20.8%

⁵ www.repoweramerica.org. Nebraska factsheet. Last referenced 10/06/09.

BUILDING A 'GREEN' ECONOMY:

NEBRASKA STATE ENERGY SECTOR PARTNERSHIP (SESP) AND TRAINING

and 'green' Construction	17-1011	Commercial 'green' building and retrofit architects	17.7%
	11-9021	Construction managers	23.5%
	47-2181	Cool roofing installers	20.9%
	11-9021	Energy efficient site foremen	23.5%
	17-2051	Energy infrastructure engineers	20.8%
	11-9021	Environmental construction engineers	23.5%
	17-1011	'Green' building architects and designers	17.7%
	13-1073	'Green' building material construction trade instructors	23.1%
	13-2051	'Green' material value-added assessors	38.1%
	47-2152	'Green' building plumbers and pipefitters	17.9%
	49-9021	Geothermal water/heat pump contractors and installers	17.1%
	17-2141	HVAC engineers	17.3%
	49-9021	HVAC contractors and installers	17.1%
	17-2141	HVAC sensors and digital control engineers	17.3%
	17-2051	Hydroelectric plant structural engineers	20.8%
	17-2141	Industrial 'green' systems and retrofit designers	17.3%
	47-2151	Plumbers, pipefitters and steamfitters	17.9%
	11-9021	Project managers – environmental construction	23.5%
	17-1011	Residential 'green' building and retrofit architects	17.7%
	47-2181	Roofers	20.9%
	47-2211	Sheet metal workers	17.2%
	11-9021	Site supervisors and technical operators	23.5%
	11-9021	Solar installation managers and project foremen	23.5%
	17-2051	Structural design engineers	20.8%
	17-2051	Wastewater plant civil engineers	20.8%
	17-2051	Water systems designers and engineers	20.8%
	11-9021	Weatherization operations managers	23.5%

Source: Nebraska Department of Labor-Labor Market Information – Occupational Projection

Sector Focus Areas

The state is uniquely positioned as a regional and national leader in three energy sector focus areas identified by the SESP. These sectors include renewable wind, biofuels energy, and energy-efficient 'green' building technology. Wind energy is currently the most versatile and economical renewable energy option available. Although Nebraska is ranked 6th in the US by wind potential capacity, its actual installed capacity is ranked 24th.⁶ This underutilized renewable energy resource presents tremendous opportunities for Nebraska to develop wind turbine

⁶ Nebraska Energy Office. State Energy Plan. 2009

technology, produce towers, turbines and blades, sell wind products and services, and, build commission, operate and maintain wind farms.

More than 93% of Nebraska's total land area (45.6 million acres) is devoted to agriculture⁷ and is an ideal setting for co-located wind farms. Exportation of wind energy can generate revenue to reduce taxes, offset rate increases and fund more economic development in wind and other renewable energy industries. Such an initiative will place Nebraska among the nation's leaders in renewable energy and will create jobs in the wind turbine, energy storage and transmission utility industries throughout the Midwest region and U.S.

Agriculture accounts for nearly 20% of the state's \$85 billion gross domestic product (GDP) and more than 5% of the nation's agriculture-related GDP. Livestock accounts for nearly 60% of the state's agriculture and is the nation's largest source of methane from animal waste and food packaging byproducts. Nebraska produces 1.7 billion gallons of ethanol each year with over 40% of the state's corn crop dedicated to bio-fuels⁸. For every \$1 in agricultural exports nearly \$2 is generated in economic activity.⁹

As part of the state energy sector strategy, Nebraska will explore ways to encourage economic development and job creation in industries that help farms and ranches replace consumed energy with renewable energy sources in their operations. Nebraska is uniquely positioned to create new employment opportunities for developing next generation cellulosic ethanol and 'super-loop' methane digesters, producing ethanol refineries for transportation fuel and packaged methane recovery units for boiler heat, bottled gas or distributed generation,

⁷ Nebraska Agriculture: Fact Card. Nebraska Department of Agriculture and the U.S. Department of Agriculture (USDA). 2009.

⁸ Id.

⁹ Id.

selling biofuel products and services, installing, commissioning, operating and maintaining refineries and packaged methane units.

In 1980, Nebraska became one of the first states to adopt a building energy code and is considering adoption of the advanced commercial energy code which exceeds the 2006 International Energy Conservation Code (IECC) by 30%.¹⁰ Nebraska is also implementing a comprehensive and coordinated approach to net zero energy buildings by creating demonstration projects such as the University of Nebraska's Zero Net Energy Test Home (ZNETH) and promoting use of the USGBC LEED Standard 3.0 as well as Federal and state incentives to increase the cost-effectiveness of measures that exceed energy code standards. Recovery Act funds of \$10M will be used to maximize energy efficiency in existing state buildings, creating new jobs and reducing O&M costs. Nebraska's Dollar and Energy Savings Loan Program will finance local government energy efficiency improvements for public buildings.

Three of the top twenty building design firms in the United States are headquartered in Omaha, Nebraska; HDR, Inc. (7,500 employees), Leo A. Daly (1,500 employees) and DLR Group (500 employees). The three firms have more than 200 offices throughout the U.S. and around the world. Kiewit Corporation, one of the largest privately owned national construction firms in the U.S., is headquartered in Omaha. Omaha is also the home of the U.S. Army Corp of Engineers Omaha District that serves the Upper Missouri River Basin. According to the report *Occupational and Industry Projections* developed by NDOL, design service industries are projected to hire 13,464 new professionals between 2006-16, a growth of 17.88% versus a projected growth of 10.4% nationally. The report also projects 14.83% job growth in construction industry during the same period.

¹⁰ Nebraska Energy Office. State Energy Plan. 2009)

Training Activities

Training will be developed and delivered using both public and private industry partnerships to enable priority populations to compete for employment opportunities in new and emerging 'green' energy industries as defined by Title X of the Green Jobs Act of 2007. Specifically, the existing O*NET skill sets of workers displaced from industries disproportionately impacted by the recession, at-risk youth, military veterans and other unemployed or underemployed priority groups, will be evaluated in relation to the new O*NET skill sets that will be required to obtain employment in the 'green' energy marketplace. Training programs will then be developed to address these skill gaps through the creation of several general and trade specific training modules that can be customized according to the needs of a focus industry or demographic group. To the greatest extent possible, training will result in a degree or certification.

Training materials will be developed and delivered in a manner that responds to labor market trends and specific industry sector workforce needs. Materials will be delivered in a modular format consisting of core training materials applicable to several renewable energy and energy efficiency trades and trade-specific training materials. A suite of core and trade specific modules will be available to trainers and career counselors to customize training that responds to immediate employer needs within the identified 'green' energy sectors.

The training program will consist of online delivery suitable for either distance education or classroom instruction and 'hands-on' field training. Each module will include descriptive text, graphics and streaming video clips supporting classroom instruction. For distance education purposes, the online training materials will have an instructor voice-over function providing an interactive self-study experience. Training will be developed in a bilingual (English-Spanish) and

literacy appropriate formats. Upon completion of each module, participants will be asked to complete a competency examination. The training modules will be written in HTML format and will be compatible across all web browsers, meaning any instructor or student with Internet access will have public access to the training program. Since the online training program will be hosted on a central SQL server site at the University of Nebraska, there will be no need to provide software disks to users to install or update the training modules, reducing the cost and improving the effectiveness of the program. In addition, the project team can update and maintain the program in 'real time.'

Classroom instruction and online self study will be reinforced by hands-on training associated with trade specific wind turbine, biofuels recovery, and 'green' building projects recreated in cyberspace using virtual reality technology. This state-of-the-art platform will allow trainees to organize into small teams and apply the information learned in the training modules to complete a simulated design, fabrication, installation, operations and maintenance project in wind energy, biofuels recovery, or 'green' building construction retrofit. Teams will be encouraged to collaborate during the training sessions to improve their technical competencies, critical thinking ability, and communication skills. The project team has successfully developed and delivered training of this type for EPA and OSHA.

Following classroom instruction and project simulations, trainees will be placed into structured apprenticeship programs with partner industries to develop on-the-job training skills and to ensure job placement. To maximize outreach effectiveness and consistency and to minimize costs, the curriculum will be developed in a train-the-trainer format. This means counselors and training specialists at 17 statewide career centers and instructors from the community colleges and other training vendors will initially be trained by faculty and staff from

the University of Nebraska. These trainers, in turn, will train program participants recruited from priority workforce groups. Throughout the program, training and job placements will be tracked as part of the program's progress and outcome assessment process by One Stop Career Center Staff.

The key objective of this program is to incorporate, not duplicate, the broad array of existing training and apprenticeship programs available in the state. For example, the Associated Builders & Contractors (ABC) provides apprenticeship and training programs for electric, plumbing and sheet metal occupations supporting new and emerging 'green' energy industries. Metropolitan Community College has LEED certification programs on deconstruction and energy management. Northeast and Western Nebraska Community Colleges provide technical training in wind energy generation and transmission. This grant will integrate the State's web of training programs.

ii. Priority Populations

Priority populations to receive training under the energy sector plan are; individuals in need of updated training related to the energy efficiency and renewable energy industries, Veterans including past and present members of the reserve companies of the Armed Forces, unemployed individuals, at-risk youth, and individuals with a criminal record. Additionally, untapped labor pools like the underemployed, entry-level and incumbent workers may also be served through the training programs offered through this grant. It is recognized that any one of these priority population groups can present challenges; therefore the following strategies will be used to address potential barriers:

- Individuals in need of updated training related to the energy industries--identify non-traditional learning models to provide a variety of training options from basic skills to math and science to hydro-technologies. This training needs to be in a format that can be delivered

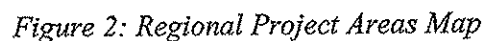
in a variety of settings reaching across 93 counties in Nebraska. Training format will take into consideration both traditional and non-traditional learning venues.

- Veterans--outreach efforts and support systems will be coordinated with the Jobs for Veterans Act (JVA) grants administered through the One Stop Career Center services as well as county veteran service offices.
- Unemployed individuals--work closely with Unemployment Insurance, Re-employment Services, Health and Human Services, and other community-based organizations to identify those unemployed who may benefit from training and to coordinate the benefits offered by any one of these entities to encourage the participation of the unemployed.
- At-risk youth--work closely with the alternative schools, court and probation offices, human services, WIA youth program, and other community youth providers to recruit and enroll youth. It will be critical to utilize the support systems these organizations provide for successful participation of youth. For training purposes this grant will focus on at-risk youth ages 18-24. Career education in the energy sector efforts will be tailored to middle through high school students.
- Individuals with criminal records--NDOL has experience training ex-offenders for job placement and could use this knowledge to steer them into 'green' industries. Transitional services could also be used to provide support as these workers shift back into society. Probation officers will also be utilized to determine the best applicants for training programs.

iii. Project Teams

Geographic area: The Nebraska State Workforce Investment Board, and the SESP will provide guidance to project teams consisting of key personnel from statewide and local WIBs, career centers, labor organizations, industry associations, universities, community colleges, and other Federal and state agencies. The SESP has identified three geographic areas of the state where Regional Project Teams will be established; Western, Northeast, and Metro areas. The Regional Project Teams will be tasked to provide recruitment, training, job placement, job retention, and other supportive services that promote skill attainment and career pathway development for workers in 'green' energy sectors. The three Regional Project Teams will represent the following

geographical areas of the state: Western will encompass 12 counties (Scotts Bluff, Sioux, Banner, Kimball, Box Butte, Morrill, Cheyenne, Garden, Deuel, Keith, Lincoln, and Dawson); Northeast will encompass 30 counties (Keya Paha, Brown, Rock, Blaine, Loup, Custer, Boyd, Holt, Garfield, Valley, Sherman, Wheeler, Greeley, Howard, Knox, Antelope, Boone, Pierce, Madison, Platte, Cedar, Wayne, Stanton, Colfax, Dixon, Dakota, Thurston, Cuming, Dodge, and Burt); and Metro will encompass 7 counties (Sarpy, Saunders, Douglas, Lancaster, Washington, Cass, and Seward). These three geographical areas were selected based on the following factors 1) number of energy sector businesses, 2) number of existing 'green' training programs in process, 3) locations of planned energy sector projects, and 4) career center and community college locations. Additional considerations were locations of recent and upcoming layoffs and number of workers affected. The Western Regional Project Team will focus on renewable wind energy, the Northeast Regional Project Team will focus on renewable wind and biofuels, and the Metro Regional Project Team will focus on 'green' building technology. Figure 2 illustrates the Regional Areas and consideration factors.



**BUILDING A 'GREEN' ECONOMY:
NEBRASKA STATE ENERGY SECTOR PARTNERSHIP (SESP) AND TRAINING**

Table 2: Western Nebraska Region

County	City	Activity
Box Butte	Alliance	○ Western Nebraska Community College, Powerline Construction Program
Kimball	Kimball	△ Municipal Energy Agency of Nebraska wind farm
Banner		□ Planned wind farm in county through Midwest Wind Energy
Dawson	Cozad	X Displaced workers by Tenneco, auto affected community
Scotts Bluff	Scottsbluff	○ Western Nebraska Community College, Electrical program
Cheyenne	Sidney	○ Western Nebraska Community College, Electrical, powerline, avionics programs

Table 3: Northeast Nebraska Region

County	City	Activity
Platte	Columbus	△ Katana Summit, LLC, wind towers
Knox	Bloomfield	△ Elkhorn Ridge wind farm
	Crofton	△ Crofton Hills wind farm
Brown	Ainsworth	△ Ainsworth wind farm
Keya Paha	Springview	□ Planned site for experimental wind turbines with Nebraska Public Power District
Custer	Broken Bow	□ Planned wind turbines through Nebraska Public Power District
Boone	Petersburg	□ Planned wind turbines through Nebraska Public Power District
Dakota	South Sioux City	△ Natural innovative Renewable Energy, biodiesel plant
Dodge	Scribner	△ Bronte Enterprise, LLC, wind energy supplier
Burt	Oakland	○ Nebraska Renewable Energy association (NeREA), helping people make personal energy decisions
Madison	Norfolk	△ Nucor Corporation
	Norfolk	○ Northeast Community College, Wind Technology diploma Program started August 2009

**BUILDING A 'GREEN' ECONOMY:
NEBRASKA STATE ENERGY SECTOR PARTNERSHIP (SESP) AND TRAINING**

Table 4: Metro Nebraska Region

County	City	Activity
Douglas	Omaha	△ Kiewit Building Group Inc., energy efficient building
	Omaha	○ Training tower for wind tower, IBEW Local #22
	Valley	△ Omaha Public Power District wind turbines
Lancaster	Lincoln	△ Lincoln Electric System, Salt Valley wind turbines
	Lincoln	△ Dixon Power Systems, consult design install solar and wind electric systems
	Lincoln	△ Ecostores Nebraska, second hand building materials to keep out of landfill
	Lincoln	△ WasteCap, non-profit cooperative recycling services for businesses
	Lincoln	○ UNL- center for Energy Sciences Research headed by Professor Jerry Hudgins
Douglas/Lancaster		△ HDR

Qualifications and Experience

Lorena Hernandez will serve as the lead staff member for both the Western and Northeast Project Teams. Co-leads from the Greater Nebraska WIB include: Randy Kissinger, Regional Career Center Manager representing the Western Regional Project Team; and Jill Smith, with BD (Becton, Dickinson & Company) representing the Northeast Regional Project Team. Ms. Hernandez is a graduate from the University of Nebraska with a degree in Environmental Studies and is an administrator for the Greater Nebraska Workforce Investment Board(WIB) which serves the 88 rural counties of the state. She has a strong understanding of the WIA programs and 10 years of management/supervisor experience. Co-lead Jill Smith is Senior Human Resources Representative at BD. She is a member of the Greater Nebraska WIB and Chairs the compliance committee. As a company, BD recently initiated the office of Global Sustainability. This initiative has begun work to improve the company's performance in greenhouse gas

BUILDING A 'GREEN' ECONOMY:

NEBRASKA STATE ENERGY SECTOR PARTNERSHIP (SESP) AND TRAINING

emissions, managing materials of concern in their products, and reducing the environmental footprint of their operations. Co-lead Randy Kissinger is a graduate from the University of Nebraska with a degree in Management and Marketing. He has been employed with the Nebraska Department of Labor since 1985.

JoAnn McManus will serve as the lead staff member for the Metro Project Team. Ms. McManus is the administrator for the Tri County Workforce Investment Board. She has over 20 years of experience in economic development which includes six years working for a public electric utility and 4 years of grant management. Co-leads for the Metro Regional Project include Becky Golden, Vice President of H.R./EEO/Training for Kiewit Building Corporation and Jim Linderholm, Chair of the Board of Directors for HWS Consulting, a regional engineering firm. Ms. Golden serves on the Tri County WIB and has 18 years of high level human resource management. Mr. Linderholm serves as Chair of the Lincoln Workforce Investment Board for the past 9 years.

Partner Roles and Responsibilities.

All partners listed below will serve on the Regional Project Teams.

Partners	Major Roles
Energy Sector Companies i.e., Katana Summit, Bronte Enterprise, Nucor Steel, NE Public Power District, Black Hills Energy, Kiewit Building Group, Dixon Power Systems, OPPD, MUD, etc.	Advise on 'green' job expansion and needed skill set; Provide training and job placement opportunities
Energy Sector Associations, i.e., ABC, AGC, Energy Rescue, USGBC, etc.	Advise on renewable energy; Provide on the job training; Provide employment information for job placement
Local Chambers of Commerce/Economic Development	Advise on economic conditions and economic development policies
Local Workforce Investment Board	Advise on workforce conditions, employment trends, training needs, and training policy.
One Stop Career Center Staff	Recruit and place trainees; Recruit training providers; Monitor the programs and trainees; Project reporting

BUILDING A 'GREEN' ECONOMY:**NEBRASKA STATE ENERGY SECTOR PARTNERSHIP (SESP) AND TRAINING**

University of Nebraska-Lincoln	Coordinate training materials development; Train instructors; and Manage short training
Community Colleges	Develop training materials and deliver training courses; Assist in recruitment and job placement
IBEW 22, Steamfitters & Plumbers Local Union 464	Assist in training materials; Provide training and job placement
Nebraska Dept. of Education/FutureForce	Develop materials for high school students and adult job seekers; Incorporate them into high school curricula and career center services
NDOL – Office of E&T and Office of Unemployment Insurance	Provide technical assistance and oversight on program strategies and implementation
US DOL – Office of Apprenticeship	Advise on training programs, recruitment and job placement practices, and apprenticeship programs

Table 5: Proposed project team Partners roles and responsibilities.

Recruitment, Training, Placement, and Retention

A significant part of the Energy Sector Plan will be to provide resources to the three Regional Project Teams who will be responsible for recruitment, training, placement, and retention. The SESP will ask for proposals from the three Regional Project Teams. At a minimum, each proposal must meet the following criteria;

Recruitment: The One Stop Career Center in collaboration with the local community college or other energy sector training providers will take the lead role in recruitment and job placement effort. The recruitment strategy will have two primary areas of focus 1) incumbent workers who are or will be impacted by national energy and environmental policies, as well as workers in need of updated training and 2) unemployed individuals with emphasis on dislocated workers, at-risk youth, Veterans, and individuals with criminal records. The incumbent worker strategy will focus on existing employers who have expanding 'green' occupations. The Regional Project Team will work with partner members to recruit employers to participate in 'green' training opportunities. The existing employers will be surveyed to determine skill gaps for training. The recruitment strategy for identifying unemployed workers will be coordinated primarily through the One Stop Career Centers. Staff will utilize the Auto-Coder program to

**BUILDING A 'GREEN' ECONOMY:
NEBRASKA STATE ENERGY SECTOR PARTNERSHIP (SESP) AND TRAINING**

identify unemployment insurance claimants who have experience and interest in 'green' occupations but are currently unemployed. Staff at the Career Centers will also infuse the 'green' training opportunities as a potential pathway for those individuals participating in the Re-employment Services, WIA and Veterans programs. Priority of service (POS) must be afforded to Veterans seeking services. Outreach and recruitment efforts will also include 'green job' career fairs sponsored by One Stop Career Centers, community colleges, and community partners. Electronic methods of delivery will be highly encouraged. The recruitment effort must also demonstrate how they will interface with secondary career and technical education programs, to help identify career pathways for high school students in the 'green' and renewable energy industries and recruit them into 'green' occupations. A key requirement will be that the Regional Project Team communicate, promote and improve access to 'green' training opportunities.

Training: Training program options must include: classroom training, customized training, on-the-job training, and work experience programs. To the greatest degree possible, these training programs must result in a degree or certification. Utilization of new and existing curricula will be required. University of Nebraska-Lincoln will review existing and create new curricula where there are gaps. The curricula will meet new 'green' industry standards and provide bilingual (English-Spanish) and literacy appropriate formats.

In order to reach and serve the target populations, training options should be provided at varying literacy levels with sensitivity to bilingual needs. Classroom training will be provided by WIB approved eligible training providers. Customized training can be designed to meet a specific employer need in conjunction with a training provider. On-the-job training provides

actual "hands-on" experience with an employer and work experience can be used as a starting point in establishing or updating a work history.

On-going case management is a key element in integrating supportive services within the training component. Supportive services must be provided to the priority populations to ensure their successful participation in training. Supportive services can include: transportation, child care, etc. Case management and support services resources will be coordinated and leveraged with existing WIA and Wagner-Peyser funds (both annual allocation and Recovery Act).

Placement: Placement activities will be coordinated through the One Stop Career Centers and college placement offices. These entities will work with current and emerging businesses to develop job placement opportunities. Methods to ensure the seamless transition of training to placement will include: utilization of WOTC, On-the-job Training, the Worker Training Program, the Bonding Program, and other employer incentive programs; coordinate with employers participating in 'green' training for incumbent workers to identify potential openings due to attrition and/or expansion.

Retention: Retention strategies must utilize case management and supportive services to assist individuals who have complete training and have been placed in employment. Career Center staff will identify potential barriers that may prohibit participants from successfully maintaining employment and, to the extent possible, utilize partner programs and resources to address these issues. Career Center staff will work proactively with employers before placement, as well as during the initial employment start up period, to ensure any barriers to success of the new employee can be addressed. Supportive Services may be provided such as transportation, child care, dependent care, housing and needs-related payments.

iv. Management Capacity

The Nebraska State WIB as the applicant will utilize the State Workforce Agency (Nebraska Department of Labor) to provide fiscal, administrative, and performance management to support this grant. The Agency has been responsible for supporting the State WIB in the areas of compliance, federal reporting, and program delivery. The Agency successfully manages approximately \$31 million annually in Federal Grants. It is the intent of the State WIB for the purpose of this grant to hire a Project Manager who will, under the leadership of the State WIB and state Workforce Agency, oversee the Regional Project Teams and successfully implement the State Energy Sector Plan. The Agency has the following internal management and administrative processes to ensure compliance with applicable Federal rules and regulations: hiring process with background checks, financial work pre-audits, and a monitoring process for all programs. The Agency uses the State approved accounting system (NIS) and is subject to APA audits, federal reviews, and Board (i.e., WIB) reviews. Ms. Debbie Kay Ward is the Agency Controller and has 20 years of fiscal responsibility. She is a Certified Public Accountant, Certified Treasury Professional, and has a B.S. in Accounting. The Agency fiscal office will be responsible for the financial, accounting, and reporting of this grant including the 1512 report.

Additionally, the NDOL Office of Employment and Training will provide oversight and technical assistance to the activities outlined in the Strategy and Project Work Plan. Ms. Joan Modrell, Director of the Office of Employment and Training will play a lead role in coordinating the SWIB and SESP, oversight and management responsibilities of the grant. Ms. Modrell has over 25 years of leadership experience in employment and training programs. The Office of Employment and Training currently coordinates and provides staff support to the SWIB.

IV. Implementation Timeline and Projected Outcomes

i. Implementation Timeline

a. Key Activities and deliverables.

- Project manager hired first quarter – first year
- SESP distributes request for proposal to Regional Project Teams first quarter – first year
- Training and curriculum development begins first quarter – first year
- Regional Team Proposals are submitted second quarter – first year
- Contracts with Regional Project Teams are finalized second quarter – first year
- Green Career Pathway work begins second quarter – first year
- Recruitment and training for existing 'green' programs by Regional Project Teams begins third quarter – first year through fourth quarter – third year
- Regional Project Teams identify and host incumbent worker opportunities fourth quarter – first year through fourth quarter – third year
- Training delivery for new curriculum first quarter – second year
- Recruitment and training for new 'green' training programs first quarter – second year through fourth quarter – third year
- Complete Career Pathway materials first quarter – second year
- Train-the-Trainer products complete and implemented second quarter – second year through fourth quarter – third year
- Distribute Career Pathway Materials to secondary schools and One Stop Career Centers second quarter – second year through fourth quarter – third year
- Job Placement and Retention Strategies- fourth quarter first year through fourth quarter - third year

b. Schedule.

	Year 1				Year 2				Year 3			
<i>Key Activities and Deliverables</i>	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Project Manager	■											
Regional Project Team (RPT) RFPs	■	■										
Curricula Development		■	■	■								
RPT Proposal Submission		■	■	■								
RPT Contracts Finalized			■	■	■	■	■	■				
Green Career Pathway Materials			■	■	■	■	■	■	■	■	■	■
Recruitment and Training (existing programs)			■	■	■	■	■	■	■	■	■	■
RPT Incumbent Worker Oppt. Recruitment and Training (new programs)				■	■	■	■	■	■	■	■	■
Train-the-Trainer Materials and Delivery					■	■	■	■	■	■	■	■
Job Placement/Retention						■	■	■	■	■	■	■

ii. Projected Outcomes

a. Processes for data collection and management.

The data collection process will mirror the current process used for WIA and Wagner-Peyser. Participant information will be collected by the One Stop Career Center staff and entered into the State Management Information System. This system has the ability to produce quarterly and annual reports currently required under WIA, TRADE, and Wagner-Peyser/Veterans Programs. Program reporting may be customized to meet the management needs of this proposal. The State Workforce Agency will be responsible for all reporting requirements of this proposal.

b. Projected performance outcomes.

Outcomes:	Incumbent Workers	Unemployed Workers	Total
Total Participants served	350	600	950
Total number of participants beginning education/training activities	350	517	867
Total number of participants completing educational/training activities (85%)	298	439	737
Total number of participants that complete education/training activities that receive a degree or certificate (80%)	238	351	589
Total number of participants that complete education/training activities that are placed into unsubsidized employment (80%)	Continued	351	351+
Total number of participants that complete education/training activities that are placed into training-related unsubsidized employment (75%)	Continued	329	329+
Total number of participants placed in unsubsidized employment who retain an employed status at first and second quarters following initial placement (90%)	Continued	315	315+

Table 6: Projected Performance Outcomes.

V. Suitability for Evaluation

Recruitment Plan: One Stop Career Centers, community colleges, and partners will implement recruitment efforts focusing on incumbent workers and the unemployed. From past experience, we expect to recruit a large number of possible participants exceeding the positions available.

Collection of Participant Information: We plan to collect applicant information that will be useful to our efforts and to others as they assess the program's applicability and success.

Project Retention Strategies: Retention strategies will include assessment, case management, and supportive services. Adequately accessing possible participants allows us to match clients with the training/work experiences that best meets their needs. Providing supportive services for at-risk participants and case management also leads to higher retention levels.

Collaboration with an Outside Evaluator: The Nebraska State WIB is open to working with an outside evaluator should the Department of Labor select our program for evaluation purposes.

Potential Benefits to Other Communities: Outside communities will benefit because of the program's success and by replicating our model. The benefits that will affect other areas can be extrapolated from expected outcomes--new jobs, higher skill levels, increased renewable energy production, new industries, less fossil fuel dependence, and a move towards climate stabilization. These outcomes will affect areas well beyond our borders. Increases in renewable energy production alone will mean many new jobs in other states to support Nebraska's new industries.

PART III: ATTACHMENTS TO THE TECHNICAL PROPOSAL

I. State Energy Sector Partnership (SESP) Charter

II. Local and Regional Project Teams

III. Abstract

I. State Energy Sector Partnership (SESP) Charter

Charter of the Nebraska State Energy Sector Partnership

Purpose: The creation of the Nebraska State Energy Sector Partnership (SESP) will align the Governor's Workforce Vision with an educated workforce skilled in renewable energy, wind production, biofuels, and energy efficient building industries. The overall purpose of the SESP is to support and grow Nebraska's 'green' economy resulting in jobs for our citizens.

Key Responsibilities: The Nebraska SESP will serve as an industry advisory committee throughout the life of the grant. The SESP has the following areas of responsibility:

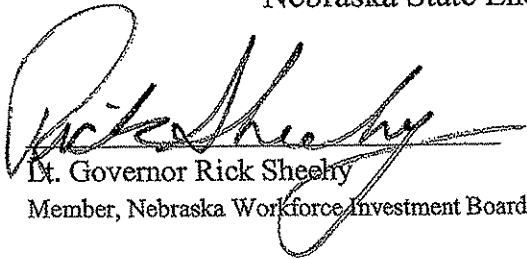
1. Provide oversight of the implementation of the Energy Sector Plan.
2. Ensure the overall success of the Energy Sector Plan.
3. Identify and encourage synergies between workforce development activities as provided by the State Energy Sector Partnership (SESP) grant and other State and Federal funded initiatives as they relate to job retention and training programs for workers in renewable energy and energy efficiency sectors.
4. Provide input and expertise in the design and implementation of the three Regional Project Committees and their proposals.
5. Participate in monthly meetings for the first year of the grant and quarterly meetings in the second and third year of the grant.

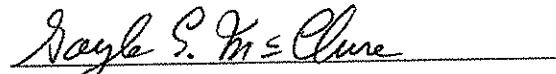
SESP Composition: The Nebraska State Workforce Investment Board has determined the composition of the SESP to include:

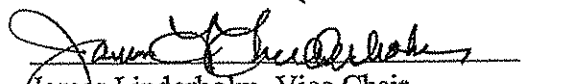
The Lieutenant Governor, the Commissioner of Labor, the Nebraska State Energy Office, the Nebraska Department of Economic Development, the Nebraska Department of Agriculture, the Nebraska Department of Education, the Nebraska Department of Veterans Affairs, the University of Nebraska-Lincoln, the Nebraska Community College Association, Union Representatives, and a variety of Energy Sector members representing renewable wind and biofuels, and 'green' sustainable building technologies.


Terms: The Nebraska SESP will take effect upon the award of the SESP grant and be active for a 36 month period.

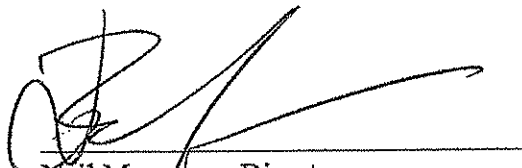
Nebraska State Energy Sector Partnership Charter

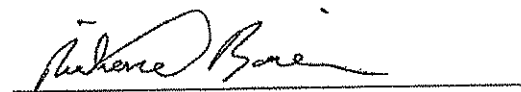

Lt. Governor Rick Sheehy
Member, Nebraska Workforce Investment Board


Gayle McClure, Chair
Nebraska State Workforce Investment Board
Sr. Vice President, Dutton-Lainson Company

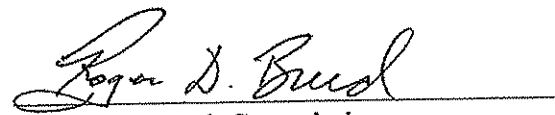

James Linderholm, Vice Chair
Nebraska State Workforce Investment Board
Chairman of the Board, HWS Consulting Group, Inc.

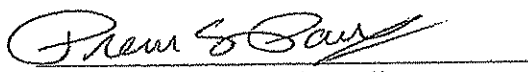

Catherine D. Lang, Commissioner
Nebraska Department of Labor
Member, Nebraska Workforce Investment Board



Neil Moseman, Director
Nebraska Energy Office


Richard Baier, Director
Nebraska Department of Economic Development
Member, Nebraska Workforce Investment Board



Greg Ibach, Director
Nebraska Department of Agriculture



Dr. Roger Breed, Commissioner
Nebraska Department of Education
Member, Nebraska Workforce Investment Board

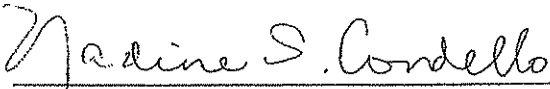

Prem S. Paul, Vice Chancellor
University of Nebraska-Lincoln
Research and Economic Development


Dennis Baack, Executive Director
Nebraska State Community College Association
Member, Nebraska Workforce Investment Board

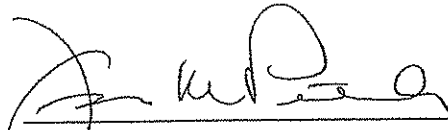
*No Signature Required


Timothy J. Carson, Director
U.S. Department of Labor, Office of Apprenticeship

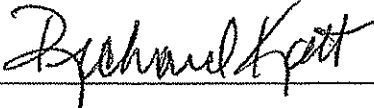

Ken Mass, President
AFL/CIO
Member, Nebraska Workforce Investment Board



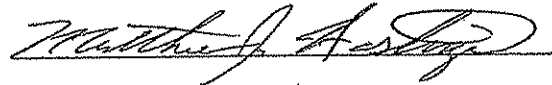
Nadine S. Condello, Executive Officer
Home Builders Association of Lincoln



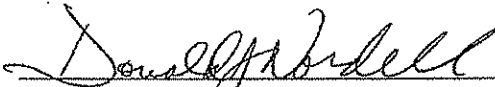
Jean Petsch, Executive Director
The Associated General Contractors of America
Nebraska Building Chapter



Richard Katt, State Director
Career Education
Nebraska Department of Education



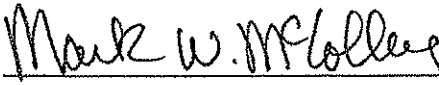
Matthew J. Hastings, Director
FutureForce Nebraska



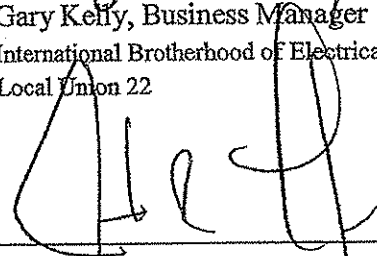
Donald J. Nordell, Director
Black Hills Energy Corporation
Member, Nebraska Workforce Investment Board



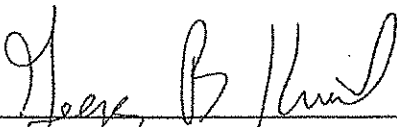
Gary Kelly, Business Manager
International Brotherhood of Electrical Workers
Local Union 22



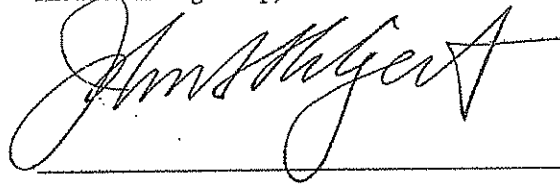
Mark McColley, Manager
Steamfitters & Plumbers Local Union 464
Member, Nebraska Workforce Investment Board



Joe Lempka, P.E., President
Kiewit Building Group, Inc.



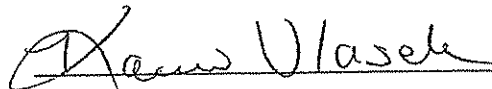
G. Bruce Kevil, Executive Vice President
Nebraska State Home Builders Association
Green Build Council



John Hilgert, Director
Nebraska Department of Veterans Affairs
Member, Nebraska Workforce Investment Board



J. Todd Hall, Vice President, Consumer Services
Lincoln Electric System



Karisa Vlasek, Grant Administrator
Omaha Public Power District

II. Local and Regional Project Teams**Local and Regional Project Teams****Western Region Project Team**

Category	Partner	Roles/Responsibility
1. Energy Sector Related Companies	Representative	On the job trainings, Apprenticeships, Work Experiences
2. Energy Sector Associations	Representative	Advisory capacity
3. Chamber of Commerce/Economic Development	Chamber/ED Representative	Advisory capacity
4. Local Workforce Investment Board	Randy Kissinger	Policy creation & implementation
5. One Stop Career Center Staff	Career Center Representative	Case management & job placement
6. University of Nebraska-Lincoln	UNL Representative	Training & Curricula Development
7. Community Colleges	Western Nebraska and Mid-Plains Community Colleges Representatives	Training & Curricula Development
8. IBEW, Steamfitters & Plumbers Local Union 464	Union Representative	On the job trainings & Apprenticeships
9. Nebraska Department of Education/FutureForce	Dept. of Ed. Representative	Advisory capacity, Career Pathway Development
10. NDOL—Office of E & T and Office of UI	Lorena Hernandez	Program Oversight
11. US DOL—Office of Apprenticeship	Tim Carson	Apprenticeship Development

BUILDING A 'GREEN' ECONOMY:**NEBRASKA STATE ENERGY SECTOR PARTNERSHIP (SESP) AND TRAINING****Northeast Region Project Team**

Category	Partner	Roles/Responsibility
1. Energy Sector Related Companies	Representative	On the job trainings, Apprenticeships, Work Experiences
2. Energy Sector Associations	Representative	Advisory capacity
3. Chamber of Commerce/Economic Development	Chamber/ED Representative	Advisory capacity
4. Local Workforce Investment Board	Jill Smith	Policy creation & implementation
5. One Stop Career Center Staff	Career Center Representative	Case management & job placement
6. University of Nebraska-Lincoln	UNL Representative	Training & Curricula Development
7. Community Colleges	Northeast and Central Community Colleges Representatives	Training & Curricula Development
8. IBEW, Steamfitters & Plumbers Local Union 464	Union Representative	On the job trainings & Apprenticeships
9. Nebraska Department of Education/FutureForce	Dept. of Ed. Representative	Advisory capacity, Career Pathway Development
10. NDOL—Office of E & T and Office of UI	Lorena Hernandez	Program Oversight
11. US DOL—Office of Apprenticeship	Tim Carson	Apprenticeship Development

Metro Region Project Team

Category	Partner	Roles/Responsibility
1. Energy Sector Related Companies	Representative	On the job trainings, Apprenticeships, Work Experiences

BUILDING A 'GREEN' ECONOMY:

NEBRASKA STATE ENERGY SECTOR PARTNERSHIP (SESP) AND TRAINING

2. Energy Sector Associations	Representative	Advisory capacity
3. Chamber of Commerce/Economic Development	Chamber/ED Representative	Advisory capacity
4. Local Workforce Investment Board	Becky Golden—TCWIB; Jim Linderholm GLWIB	Policy creation & implementation
5. One Stop Career Center Staff	Career Center Representative	Case management & job placement
6. University of Nebraska-Lincoln	UNL Representative	Training & Curricula Development
7. Community Colleges	Metro and Southeast Community Colleges representatives	Training & Curricula Development
8. IBEW, Steamfitters & Plumbers Local Union 464	Union Representative	On the job trainings & Apprenticeships
9. Nebraska Department of Education/FutureForce	Dept. of Ed. Representative	Advisory capacity, Career Pathway Development
10. NDOL—Office of E & T and Office of UI	JoAnn McManus	Program Oversight
11. US DOL—Office of Apprenticeship	Tim Carson	Apprenticeship Development

III. Abstract

Project Title: syNErgy Partnership
Applicant Name: Nebraska State Workforce Investment Board
Area to be Served: Both Rural and Urban Nebraska
Funding Request: \$4,839,511.00

The current economic recession has significantly impacted the employment condition in the State of Nebraska. The total number of unemployed increased from 32,866 in 2008 to 48,052 in 2009. The regular unemployment benefits skyrocketed from \$59.8 million to \$118.1 million from 2008 to 2009, plus an additional \$48.3 million in extended benefits.

The proposed Nebraska State Energy Sector Partnership (SESP) specifically aligns the Governor's Workforce Vision with the State's Energy Plan to address the economic impact of the current recession. The overarching goal of the SESP will be to create economic growth and promote environmental sustainability. The plan intends to provide workforce development, business development, and public education outreach in three energy industry sectors that the State of Nebraska is uniquely positioned to serve as a regional and national leader. These sectors include: renewable wind, biofuels and 'green' sustainable building technologies. The near-term goal of this program is to preserve and create new jobs in power generation, transportation, building, agriculture and waste management markets while reducing the environmental footprint of these energy-intensive industries. The long-term goal of this proposal is through a collective effort to build a 'green' economy in Nebraska and to serve as a model for the development of a skilled workforce ready to meet the demands of energy efficiency and renewable energy industries unique to the U.S. Midwest region.

The grant proposes to form three (3) regionally geographic projects which will develop and implement successful training and employment strategies in the three energy industry sectors.

BUILDING A 'GREEN' ECONOMY:

NEBRASKA STATE ENERGY SECTOR PARTNERSHIP (SESP) AND TRAINING

These projects will be located in Western Nebraska for wind, Northeast Nebraska for wind and biofuels, and Metro Nebraska for 'green' sustainable building technologies

The purpose of the grant is to develop a State Energy Sector Plan that includes the following:

- An aggressive outreach methodology will be used to identify employer needs and act as a catalyst for curriculum development. The end result will be a Nebraska State Energy Sector Strategy that creates a stronger labor market system that benefits employers and workers for years to come.
 - Priority populations are: workers impacted by energy policy, workers in need of updated training, veterans, unemployed individuals, at-risk youth and those with a criminal record. Strategies and training activities that address the needs and demands of the target populations will be developed by the Nebraska Regions.
 - Training for workers will be targeted for each Nebraska Region based on the job opportunities there. Training services will be given through local community colleges, secondary and post-secondary education, apprenticeship, customized training and other industry specific training vendors.
 - For each energy and renewal energy industry, a determination will be made as to which occupations to focus training resources on. Guidelines will be set as to how resource opportunities will be distributed geographically and how local input will be incorporated. Project teams will be determined at the executive level as to which agencies will lead different components.
-

BUILDING A 'GREEN' ECONOMY:

NEBRASKA STATE ENERGY SECTOR PARTNERSHIP (SESP) AND TRAINING

- Specifically targeted will be workers in Dawson County in the Western Nebraska Region affected by automotive restructuring. Approximately \$300,000-500,000 will be allocated to the Western Nebraska Region and priority in spending for training will be given to the auto affected workers.

The proposal requires that the Nebraska State Workforce Investment Board establish a State Energy Sector Partnership (SESP) that acts as the industry advisory committee. The SESP is a committee of business, government, education and energy sector representatives that have oversight of the implementation of the energy sector plan. Members of the SESP must sign a charter that commits them to serving on the SESP.
